

DSL-1000 Series



Featuring:

180 kHz **(DSL-1000-180)** ,140 kHz **(DSL-1000-140)** or 80 kHz **(DSL-1000-80)** searchlight type sonar system

Digital receiver design based on leading-edge DSP technology, offering superbly defined image resolution, wide-dynamic range sonar echogram previously unavailable with traditional analog circuitry designs.

State-of-the-art signal processing techniques include selectable gain-controllable range offsets, TVG control curves, receiver passbands, echo dynamic ranges, and overall gain attenuation setting (for prevention of receiver blocking by short/shallow range signals).

Selectable transmit power levels with automatic selection of pulse widths optimized for the range in use, with each pulse expandable in 2 steps for long range search applications where additional effective power to targets is needed

Operating modes include sonar mode (full circle/sector scanning with off-centering), side scanning (bottom scanning) and echo sounder modes, each mode shown across full screen area or split screens with simultaneous presentation of system parameter settings or timewise compressed sounder mode echogram.

Eight search/depth ranges are user-definable in 10unit steps from 10 to 2000 meters, fathoms, braccia, or in 20-unit steps for footage-calibrated range scales. **XGA** video output available for uncompromised echogram resolution across an optional devoted 17-inch LCD marine monitor or a commercially available PC display accepting XGA format signal input.

Automatic soundome retraction initiated by the ship exceeding a preset speed limit with an external GPS speed data source connected

Built-in transducer stabilizer enabling the energy beam tilt angle to remain unaffected independent of the ship's rolling or pitching under rough sea conditions

Single-touch keypress for storage and recall of 3 sets of user-defined settings for different types of fishing, different underwater conditions or for use by different operators

Built-in target lock function steering the energy beam to stay locked onto a moving target of interest

Audio output of sonar pings for remotely monitoring target detection via a commercially available speaker at a convenient location away from the sonar display, eliminating the need to constantly keep a watch on the sonar screen

Supports a ubiquitous USB memory drive for storage of hard-earned operational settings you cannot afford to lose or software update when available from your dealer.



DSL-1000 Series

SPECIFICATIONS

Frequency: 80 kHz (DSL-1000-80), 140 kHz (DSL-1000-140) or 180 kHz (DSL-1000-180)

Operating Modes: Sonar, Bottom (Side) Scanning, Echo Sounder

Search/Depth Ranges: 8 user-definable ranges to 2000 m/fm/br in 10-unit steps

Transmit Power: Approx. 1.5 kW (max.), adjustable in 4 steps

Beam Width (-6db): 19° (H) X 15° (V)/80 kHz, 12° (H) X 12° (V)/140 kHz, 10° (H) X 10° (V)/180 kHz

Gain Control Offset: 10, 20, 30, 40, 50 dB

TVG Curves: 10Log R, 20Log R, 30Log R, 40Log R

Receiver Passbands: Selectable in 5 steps

Recommended Trunk: 146 mm (6") inside diameter (user/shipyard-supplied)
Hoist Pipe Length: 1681 mm (standard), 1981or 3000 mm (option)

Soundome Diameter/Travel: 142 mm/200 to 400 mm

Hoisting Speed: Approx. 12 seconds for 400 mm travel at 24 VDC Scanning Speed (360°): 4.3 sec./20m, 8 sec./100m, 12.8 sec./200m

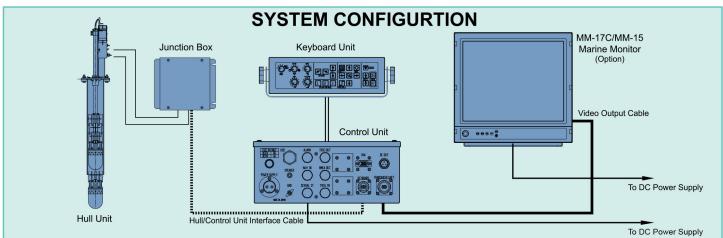
Scan Sector Widths: $5^{\circ} \sim 360^{\circ}$ in 8 steps sector for $5^{\circ}/10^{\circ}/15^{\circ}/20^{\circ}$ step scan

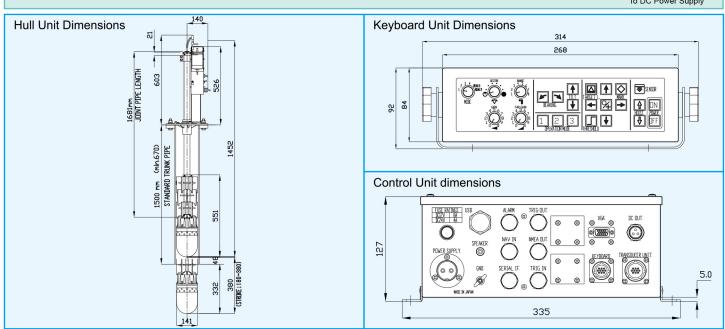
Beam Tilt Angle: $+5^{\circ}$ to -90° with max. stabilizer control rage of 25° Interface Ports: NMEA-0183, USB (FAT32), Audio (20W max. into 4Ω)

Power Supply: 10.5 to 30V DC, floating ground

Current Drain (Standby): Hull Unit: 4.1A/1.6A (12/24V), Control Unit: 6.2A/2.6A (12/24V)
Weight (Control /Keyboard/Hull): Approx. 3.5 kg/1.1 kg/38 kg (hoist, soundome, junction box included)

NOTE: Specifications are subject to change without notice or obligation.







36-2-1001 Udagawa-cho, Shibuya-ku, Tokyo, 150-0042 Japan Phone: +81-3-3461-3606 / Telefax:+81-3-3496-2078 E-mail:sales@japan-marina.co.jp Web site: www.japan-marina.co.jp